

**IN THE CLAIMS:**

1-14. (canceled)

15. (original) A method for manufacturing a guidewire suitable for measuring features within a vessel, the method comprising:

providing a core wire having proximal and distal sections;

coating portions of the distal section with a mask;

exposing the core wire beneath the mask at a plurality of predetermined locations;

depositing a radiopaque material at the predetermined locations; and

removing the mask.

16. (original) The method of claim 15 further comprising tapering the distal section of the core wire.

17. (original) The method of claim 15 wherein depositing a radiopaque material at the predetermined locations comprises electroplating gold onto the predetermined locations.

18. (original) The method of claim 15 further comprising coating the guidewire with a lubricious coating.

19. (original) The method of claim 15 wherein removing the mask includes chemically dissolving the masking.

20. (original) The method of claim 15 further comprising forming indentations at the predetermined locations prior to depositing the radiopaque materials.